

REMARKS

Claims 1-18; Rejected under 35 U.S.C. § 112, second paragraph

Claims 1-18 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctively claim the subject matter which Appellants regard as the invention. The Examiner states that, the phrase, “the point detector rod each being substantially straight and at least partially threaded” is confusing in light of the argument at page 8 of Appellants’ brief regarding a ninety degree bend. More specifically, the Examiner states that “the phrase ‘the point detector connecting rod each being substantially straight and at least partially threaded’ is confusing in light of the appellant’s argument set forth on page 8 of the appeal brief regarding a ninety degree bent (*sic*) as there is nothing in the specification that defines the degree of the bent (*sic*) in the point detector connecting rod.” July 17, 2006 Office Action at 2.

Applicants initially note that the argument at page 8 of Applicants’ brief related to the rejection of Claims 1, 5, and 6 under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* (U.S. Patent No. 6,648,276) in view of *Hartung* (U.S. Patent No. 4,637,579). More specifically, the Examiner stated that the rods shown in the figures of *Hartung* disclose “substantially straight rods.” As will be restated below, it is the Applicants’ position that the figures of *Hartung* are incomplete. That is, the rods shown in figures 3 and 4 of *Hartung* have “broken” lines indicating that portions of the rod are not shown. Given that the entire rod is not shown, it is impossible to state that the disclosed rod is “substantially straight.”

In response to this argument, the Examiner stated that “Applicant’s argument based on the fact that a couple of **minor bends** is shown in fig. 4 is weak to (*sic*) obliterate the fact that the connecting rod is substantially straight since no **angular requirement** with respect to the horizontal axis is placed on the connecting rod in the independent claims.” May 27, 2005 Office Action at 6 (emphasis added). Based on this statement, Applicants’ attorney (the undersigned) believed that the Examiner was stating that the “straightness” of a rod relates to the degree, that is, the “extent of” as opposed to an “angular measurement,” of the bends. In other words, Applicants’ attorney understood the Examiner to be stating that so long as a bend in a rod was not a sharp bend, the rod could be “substantially straight.”

Applicants disagree with this definition of “substantially straight rod.” Applicants believe a better interpretation of the phrase “substantially straight rod” is

that substantially the entire rod is proximal to a longitudinal axis. Thus, that point being made with respect to the elongated figure at page 8 of Applicants' brief (shown below, with edit) was that even a line with 90 degree bends, which Applicants believe qualifies as a "sharp bend" or a "non-minor bend," could still be "substantially straight."

Figure 2

That is, in the line shown, both ends of the line, as well as most of the medial portions of the line are close to the longitudinal axis (dashed line). Conversely, the other line (shown below, with edit), which has the same 90 degree bends is not "substantially straight" given that large portions of the line are spaced from the longitudinal axis (dashed line).

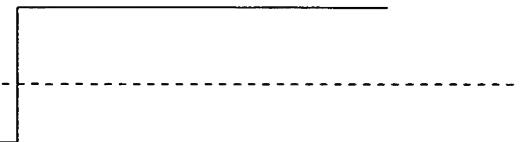


Figure 1

Accordingly, the argument at page 8 of Applicants' Appeal Brief related to the definition of what is, or is not, "substantially straight" and further showed that whether a bend is "minor" or "major" is irrelevant to that definition. Based on the Examiner's further comments, Applicants' attorney now believes that the Examiner contends that figure 4 of *Hartung* shows a "substantially straight" rod by virtue of the fact that, as shown, the axis of the left end of the rod is not substantially offset from the axis of the right end of the rod. This argument will be addressed in more detail below.

Turning more specifically to the rejection under 35 U.S.C. § 112, second paragraph, Applicants note that the argument at page 8 of Applicants' Appeal Brief stated that the figures shown were an "example" showing a line representing "a" rod and not, as the Examiner appears to have assumed, a representation of the "point detector connecting rod" recited in the claims. That is, the sentence that introduces the figures on page 8 of Applicants' Appeal Brief reads as follows, "[f]or example,

the lines in Figures 1 and 2 below represent a rod extending generally horizontally and which includes a vertical portion.” Applicants’ Appeal Brief at 8 (emphasis added).

The phrase “for example” is “used to introduce a typical instance of somebody or something” as opposed to a specific person or thing. *See, Encarta Dictionary* at <http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861609588> (copy attached as exhibit 1). Accordingly, by presenting an “example” at page 8 of Applicants’ Appeal Brief, the Applicants were not asserting that the lines representing the rods were any specific rod, such as the “point detector connecting rod” recited in the claims. This conclusion is further supported by the lack of specific modifiers and the use of a generic modifier for the word “rod.” That is, Applicants **did not** state that the lines shown on page 8 of Applicants’ Appeal Brief represented a “point detector connecting rod.” Nor did the Applicants state that the lines shown on page 8 of Applicants’ Appeal Brief represented “the” rod that was the subject of that text. Instead, the sentence that introduces the figures on page 8 of Applicants’ Appeal Brief stated that the lines represented “a” rod. The word “a” is an indefinite article “used before a singular countable noun to refer to one person or thing **not previously known or specified**, in contrast with ‘the,’ referring to somebody or something known to the listener.” *See, Encarta Dictionary* at http://encarta.msn.com/dictionary_1861582871/a.html (emphasis added) (copy attached as exhibit 2).

Therefore, it is abundantly clear that by presenting an “example” of lines representing “a” rod, the Applicants were presenting a representation of a generic rod for the sake of making a point, and, did not assert that the lines represented the “point detector connecting rod” recited in the claims. As such, the claims are not now, nor were the claims ever, indefinite under 35 U.S.C. § 112, second paragraph. Accordingly, Applicants request that the Examiner withdraw the rejection of Claims 1-18 under 35 U.S.C. § 112, second paragraph.

Claims 1 and 5-6; Rejected under 35 U.S.C. § 103(a)

Claims 1 and 5-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* (U.S. Patent No. 6,648,276) in view of *Hartung* (U.S. Patent No. 4,637,579). The Examiner has taken the position that *McQuistian* discloses all of the elements of Claims 1 and 5-6 but does not disclose a point detector connecting rod that is substantially straight and at least partially threaded. The

Examiner has additionally taken the position that *Hartung* provides a teaching of a point detector connecting rod (26) that is substantially straight and at least partially threaded in coupling relationship to a point detector. To the contrary, however, it is respectfully submitted that *Hartung* does not disclose, teach, or suggest a point detector connecting rod that is substantially straight as has been asserted by the Examiner.

It is noted that at page 3 of the Final Office Action, dated May 27, 2005, the Examiner cited Col. 3, lines 18-22 of *Hartung* as the relevant textual portion of this reference. This portion of the text reads in its entirety:

The detector bar 44 of the switch machine 20 is connected by the coupling indicated at B to the connector rod 46 of the detector rod assembly 26 and then to a point detector attachment rod 48 which is connected to the switch points 14.

Nowhere in this text is the shape of the detector bar 44 or the connector rod 46 discussed. The Examiner further stated at page 6 of the Final Office Action, dated May 27, 2005, that Figure 4 shows “minor bends” in the lock rod assembly 24. As the text does not discuss the shape of the rods, the Examiner must base the statement that the rods of *Hartung* are substantially straight on the Figures.

Applicants have previously provided, in the Applicants’ Brief - Evidence Appendix, Exhibit A, which is Fig. 1 of *Hartung* with some additional markings in red. It is conceded that the connector rod (46) of the detector rod assembly (26) and the lock rod (40) of the lock rod assembly (24) both *appear* in Fig. 1 to be substantially straight *when viewed from above*. It is respectfully submitted that such a view, by itself, cannot constitute a teaching that a longitudinal member is substantially straight. It is also noted that Fig. 3 is a view from the same perspective as Fig. 1, except including the lock rod (40) and other components in enlarged proportion. Applicants have previously provided, in the Applicants’ Brief - Evidence Appendix, Exhibit B, which are Figs. 3 and 4 of *Hartung* along with supplied red markings. Fig. 4 is a view of the same lock rod (40), but in an orthogonal direction. Fig. 4 clearly shows that the lock rod (40) includes at least a pair of bends formed therein, and such bends are indicated in Fig. 3 through the use of contour lines depicted therein, as is indicated by the red markings in Applicants’ Brief Evidence Appendix -

Exhibit B. It is noted that such contour lines in Fig. 3 are not depicted in Fig. 1, likely due to the much smaller depicted size of the lock rod (40) in Fig. 1.

It is submitted that Fig. 1 provides the only depiction of substantially the entirety of the connector rod (46) of the detector connector rod assembly (26) which is urged by the Examiner as being substantially straight and at least partially threaded. Apart from this depiction in Fig. 1, *Hartung* includes no disclosure, teaching, or suggestion whatsoever that the connector rod (46) of the detector rod assembly (26) is substantially straight. Inasmuch as the plan view of the lock rod (40) of Fig. 3 depicts contour lines that are not depicted in the relatively smaller plan view of Fig. 1, it is submitted that no conclusion regarding the relative straightness of the connector rod (46) of the detector rod assembly (26) can be drawn from its depiction in Fig. 1.

The Examiner has further stated that the Figures 3 and 4 only show “minor bends” and that the “broad terminology of a substantially straight connecting rod does not remove the possibility of minor bends in the rod.” Applicants agree that the word “substantially” precludes the requirement that the connecting rod be absolutely straight. Applicants suggest, however, that the characteristic of being “substantially straight” relates to the portion of a rod extending along, or adjacent to a common longitudinal axis relative to the total length of the rod. For example, the Examiner contends that the rod shown in Figure 4 of *Hartung* is substantially straight. That is the Examiner, apparently believes that the broken line representation of the rod is akin to its actual configuration and that the portions of the rod represented by the gaps are not considerably longer than the gaps as shown. Thus, the Examiner appears to believe that the rod shown in Figure 4 of *Hartung* looks similar to the altered Figure 4, shown below.

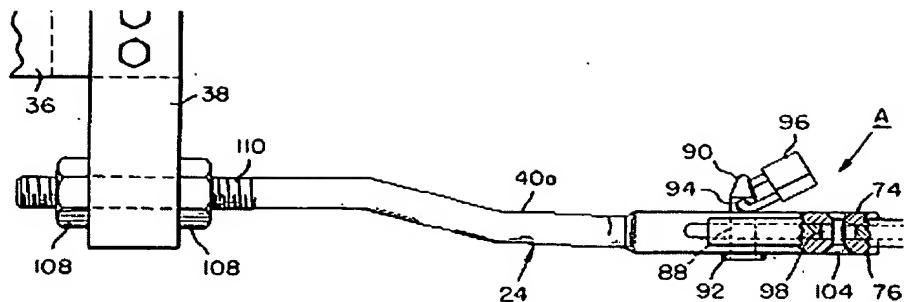
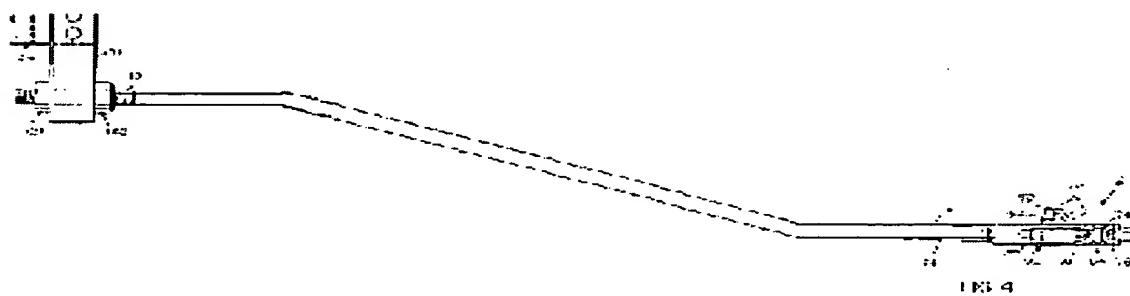


FIG. 4

Applicants disagree.

First, “substantially” is defined as, “in essence” or “in an extensive, substantial, or ample way.” *See*, Encarta Dictionary at <http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861716589> (attached as Exhibit 3). As a broken line drawing, by definition, removes a portion of the object, it is impossible to determine the “essence” of the object. That is, given that there is nothing in *Hartung* that discloses the length of the rod represented by the gaps in the broken line drawing shown in Fig. 4, it is impossible to state whether the rod is substantially straight or bent. Thus, it is possible that *Hartung* discloses a rod having a configuration as shown below.



A rod in this configuration is not “substantially straight.” Applicants do not mean to imply that the figure immediately above is accurate, but merely that it is a possibility. Given that *Hartung* fails to disclose the information required to determine the actual shape of the rod shown in Figure 4, it cannot be stated that *Hartung* discloses a

“substantially straight” rod. Accordingly, the Examiner has failed to establish *prima facie* obviousness as required under 35 U.S.C. § 103(a).

It is conceded that the connector rod (46) of the detector rod assembly (26) is at least partially threaded, as can be seen in Fig. 6. It is reiterated, however, that the connector rod (46) of the detector rod assembly (26) is not additionally disclosed, taught, or suggested in *Hartung* as being substantially straight, as is required by Claims 1 and 5-6.

Thus, based on the disclosures in the cited references, it can only be concluded that *Hartung* has no disclosure, teaching, or suggestion that the connector rod (46) is “substantially straight”, and that the other teachings of *Hartung* would strongly suggest that the connector rod (46) rather is bent to enable it to pass underneath a rail. Therefore, it is submitted that *Hartung* does not disclose, teach, or suggest the limitation of a point detector connecting rod that is substantially straight, as is required by Claims 1 and 5-6.

Moreover, *McQuistian* and *Hartung* fail to suggest a combination of the references. As stated in, *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987), “obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting combination” (emphasis added). Put another way, “the mere fact that disclosures or teachings of the prior art can be retrospectively combined for the purpose of evaluating obviousness/nonobviousness issue does not make the combination set forth in the invention obvious, unless the art also suggested the desirability of the combination” *Rite-Hite Corp. v Kelly Co.*, 629 F.Supp. 1042, 231 USPQ 161, aff’d 819 F.2d 1120, 2 USPQ2d 1915 (E.D. Wis. 1986) (emphasis added). Similarly, the court in, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), stated that “both the suggestion [to make the claimed apparatus] and the reasonable expectation of success must be found in the prior art, not in the Applicants’ disclosure”. Here, there is no suggestion that the cited references should be combined. As such, the combination of these references would not be obvious to one skilled in the art.

The Examiner has further cited *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir 1992) for the proposition that “obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

teaching, suggestion, or motivation to do so found in either the references themselves or in the knowledge generally available to one of ordinary skill in the art.” Answer at 9. The Examiner further indicated that “an ordinarily skilled artisan would be motivated to include the teaching of a point detector connecting rod (46) that is substantially straight and at least partially threaded of *Hartung* and that of ‘a first hollow tie housing an operating connecting rod and lock rod and a second hollow tie housing a lock spread rod, a lock connecting rod, and a point detector connecting rod’ of *Schwiede* into *McQuistian* in order to achieve among others the benefit of preventing damage to the switch assembly during the maintenance of the track bed.” *Id.* at 10. The Examiner, however, has not applied the standard set forth in the cases cited in the Answer.

In *Fine*, the court initially notes that the Patent Office has the burden of establishing a *prima facie* case of obviousness and further states that, “this burden [can be satisfied] only by *showing* some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” 5 USPQ2d at 1598 (emphasis added). The court then noted that the Examiner in that case had failed to show the requisite teaching or suggestion in the cited references and that the Examiner’s “bald assertion” without any support or explanation did not satisfy the Patent Office’s burden. *See*, 5 USPQ2d at 1599. Similarly, the court in *Jones*, which cited *Fine* to establish the rule, noted that because the Patent Office’s failed to present any evidence that one skilled in the art would have been motivated to combine the cited references, the Patent Office did not establish a *prima facie* case of obviousness. *See*, 21 USPQ2d at 1944.

Here, the rejections under 35 U.S.C. §103(a) are improper because the Examiner has not *shown* that there is a suggestion that the cited references should be combined. The Examiner, essentially, makes a bald assertion that the references may be combined. That is, the Examiner has simply cited selected elements from two different references and said they may be combined. Such a combination, however, has not been supported by any evidence. The Examiner’s error is rooted in the misinterpretation of the rule set forth in *Fine*. The Examiner contends that “obviousness can only be *established by combining or modifying* the teachings of the prior art.” However, *Fine* actually states that the Patent Office’s burden can be satisfied only by *showing* that knowledge generally available to one of ordinary skill

would lead to the combination of the relevant teachings of the references. Accordingly, in this application, as in *Jones*, the Examiner has failed to present any “evidence, other than the PTO’s speculation (if it can be called evidence) that one skilled in the art would have been motivated [to combine the references]” 21 USPQ2d at 1944 (emphasis in original). As such, in this application, as in *Jones*, “the PTO did not establish a *prima facie* case of obviousness....” *Id.*

Since the references, whether considered individually or in combination, fail to disclose, teach, or suggest all of the elements of Claim 1, the rejection of Claim 1, and, by dependence Claims 5 and 6, on the ground of obviousness is in error and should be withdrawn.

Claims 7-10; Rejected under 35 U.S.C. § 103(a)

Claims 7-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McQuistian* in view of *Hartung* and *Schwiede* (US 20020060273 A1). As set forth above regarding the rejection of Claims 1 and 5-6, it is reiterated that *Hartung* includes no disclosure, teaching, or suggestion of a connector rod (46) that is substantially straight. While the connector rod (46) *appears* from the perspective of Fig. 1 to be substantially straight, it is noted that the connector rod (46) must pass underneath a rail for connection with other structures, and known bends in the lock rod (40) that are depicted in Figs. 3 and 4 of *Hartung* are not similarly depicted in Fig. 1. It is thus submitted that *Hartung* fails to disclose, teach, or suggest a point detector connecting rod that is substantially straight. Further, it is again noted that in order to use a combination of references the Examiner must show where the references include a “teaching, suggestion, or incentive supporting combination.” *In re Geiger*. Again, the Examiner has failed to show where these references provide such a teaching, suggestion, or incentive.

Since the references, whether considered individually or in combination, fail to disclose, teach, or suggest all of the elements of Claim 7 and, by dependence, Claims 8-10, the rejection of Claims 7-10 on the ground of obviousness is in error and should be withdrawn.

Conclusion

In view of the remarks above, Applicants respectfully submit that the application is in proper form for issuance of a Notice of Allowance and such action is requested at an early date.

Respectfully submitted,



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